IN THE CLAIMS:

Claim 1 (Currently Amended): A system for validating an interface of a dynamically linkable component, comprising:

a check code generator that transforms said interface of said dynamically linkable component into an interface identifier representing said interface and couples said interface identifier to said dynamically linkable component; and

a interface verifier that employs said interface identifier to determine a compatibility of said interface of said dynamically linkable component.

Claim 2 (Original): The system as recited in Claim 1 wherein said check code generator transforms said interface of said dynamically linkable component into said interface identifier by transforming a textual representation of at least a portion of said interface.

Claim 3 (Original): The system as recited in Claim 1 wherein said check code generator couples said interface identifier to said dynamically linkable component by placing said interface identifier in a types declaration file.

Claim 4 (Original): The system as recited in Claim 1 wherein said interface identifier varies as a function of a version of said dynamically linkable component.

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Claim 5 (Original): The system as recited in Claim 1 wherein said interface verifier employs said interface identifier to determine a compatibility of said dynamically linkable component with a second dynamically linkable component.

Claim 6 (Original): The system as recited in Claim 1 wherein said interface verifier is a part of a second dynamically linkable component.

Claim 7 (Original): The system as recited in Claim 1 wherein said interface verifier determines a compatibility of said dynamically linkable component by comparing said interface identifier with a history list containing at least one member.

Claim 8 (Original): The system as recited in Claim 1 wherein said interface identifier is a type selected from the group consisting of:

a check sum, and

a cyclic redundancy check.

Claim 9 (Original): The system as recited in Claim 1 wherein said check code generator uses filtering directives to include and exclude portions of said interface from said interface identifier.

Claim 10 (Currently Amended): A method of validating an interface of a dynamically linkable component, comprising:

transforming said interface of said dynamically linkable component into an interface identifier representing said interface;

coupling said interface identifier to said dynamically linkable component; and

employing said interface identifier to determine a compatibility of said interface of said dynamically linkable component.

Claim 11 (Original): The method as recited in Claim 10 wherein said transforming comprises transforming a textual representation of at least a portion of said interface.

Claim 12 (Original): The method as recited in Claim 10 wherein said coupling comprises placing said interface identifier in a types declaration file.

Claim 13 (Original): The method as recited in Claim 10 wherein said interface identifier varies as a function of a version of said dynamically linkable component.

Claim 14 (Original): The method as recited in Claim 10 wherein said employing comprises employing said interface identifier to determine a compatibility of said dynamically linkable component with a second dynamically linkable component.

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Claim 15 (Original): The method as recited in Claim 10 wherein said interface verifier is a part of a second dynamically linkable component.

Claim 16 (Original): The method as recited in Claim 10 wherein said employing comprises comparing said interface identifier with a history list containing at least one member.

Claim 17 (Original): The method as recited in Claim 10 wherein said interface identifier is a type selected from the group consisting of:

a check sum, and

a cyclic redundancy check.

Claim 18 (Original): The method as recited in Claim 10 wherein said transforming uses filtering directives to include and exclude portions of said interface from said interface identifier.

Claim 19 (Previously Amended): A system for validating an interface of a dynamically linkable component, comprising:

an interface identifier, coupled to said dynamically linkable component, that represents said interface of said dynamically linkable component; and

an interface verifier that employs said interface identifier to determine a compatibility of said interface of said dynamically linkable component.

Claim 20 (Original): The system as recited in Claim 19 wherein said interface identifier is contained within a types declaration file.

Claim 21 (Original): The system as recited in Claim 19 wherein said interface identifier varies as a function of a version of said dynamically linkable component.

Claim 22 (Original): The system as recited in Claim 19 wherein said interface verifier employs said interface identifier to determine a compatibility of said dynamically linkable component with a second dynamically linkable component.

Claim 23 (Original): The system as recited in Claim 19 wherein said interface verifier is a part of a second dynamically linkable component.

Claim 24 (Original): The system as recited in Claim 19 wherein said interface verifier determines a compatibility of said dynamically linkable component by comparing said interface identifier with a history list containing at least one member.

Claim 25 (Previously Amended): A method of validating an interface of a dynamically linkable component, comprising:

coupling an interface identifier to said dynamically linkable component; and

employing said interface identifier to determine a compatibility of said interface of said dynamically linkable component.

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Claim 26 (Original): The method as recited in Claim 25 wherein said coupling comprises placing said interface identifier in a types declaration file.

Claim 27 (Original): The method as recited in Claim 25 wherein said interface identifier varies as a function of a version of said dynamically linkable component.

Claim 28 (Original): The method as recited in Claim 25 wherein said employing comprises employing said interface identifier to determine a compatibility of said dynamically linkable component with a second dynamically linkable component.

Claim 29 (Original): The method as recited in Claim 25 wherein said interface verifier is a part of a second dynamically linkable component.

Claim 30 (Original): The method as recited in Claim 25 wherein said employing comprises comparing said interface identifier with a history list containing at least one member.

Claim 31 (Previously Amended): A real-time process control system, comprising:

a plurality of sensors and controllable devices;

a controller, coupled to said plurality of sensors and controllable devices, that executes software having at least first and second dynamically linkable components to coordinate an operation of said plurality of sensors and controllable devices;

an interface identifier, coupled to said first dynamically linkable component, that represents an interface of said first dynamically linkable component; and

an interface verifier that employs said interface identifier to determine a compatibility of said interface of said first and second dynamically linkable components.

Claim 32 (Original): The real-time process control system as recited in Claim 31 wherein said interface identifier is a transformation of a textual representation of at least a portion of said interface.

Claim 33 (Original): The real-time process control system as recited in Claim 31 wherein said interface identifier is contained within in a types declaration file.

Claim 34 (Original): The real-time process control system as recited in Claim 31 wherein said interface identifier varies as a function of a version of said first dynamically linkable component.

Claim 35 (Original): The real-time process control system as recited in Claim 31 wherein said interface verifier is a part of said second dynamically linkable component.

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Claim 36 (Original): The real-time process control system as recited in Claim 31 wherein said interface verifier determines a compatibility of said first dynamically linkable component by comparing said interface identifier with a history list associated with said second dynamically linkable component and containing at least one member.

Claim 37 (Original): The real-time process control system as recited in Claim 31 wherein said interface identifier is a type selected from the group consisting of:

a check sum, and

a cyclic redundancy check.